REMARKS

Applicant has carefully considered the Final Office Action of July 28, 2003 rejecting claims 1-15 and 17-20. The Applicant wishes to express his appreciation to the Examiner for the interview conducted by the undersigned, Applicant's attorney, on October 29th, 2003. The present response is intended to implement the conclusions of the interview, and fully address all points of objection raised by the Examiner, and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application are respectfully requested.

A petition for an extension of response time is attached.

Also attached is a proposed drawing amendment.

The specification has been amended to remove typographical errors and to clarify terms where necessary.

Claims 1, 2, 5 and 17 have been amended. Claim 16 had been previously cancelled. Therefore, claims 1-15 and 17-20 remain in the case.

The present invention discloses a method to produce puncturable beverage dispensing pouches having a specific area of weakness, designed for ease of puncture, as specifically stated in the spec., on p.4, line 22.

In one embodiment, a sheet of laminate web material, having a web sealant layer, such as polyethylene, is punched and conveyed downstream to a station. There a molten sealant layer is extruded in a coating, along the entire outer surface of the sealant layer, simultaneously occluding the punch holes, as specifically stated in the spec., on p.3, lines 15-25.

The thickness of the web sealant layer, that is 40-45 microns, is half of the final sealant layer thickness. The molten sealant layer coating thickness is also 40-45

microns. Thus, the final thickness of said sealant layer is 80-90 microns, as specifically stated in the spec., on p.4, line 18.

In another embodiment, the entire surface of the front side web is covered by extrusion lamination of two layers of polyethylene, one a molten adherence layer and the second a solid outer layer, simultaneously occluding the punch holes, as specifically stated in the spec., on p.5, lines 1-11.

In another embodiment, the web is passed under a directed movable laser source, (spec., p.10, lines 21-22) enabling more than one pass over the same point, (spec., p.6, lines 1-5) to provide a point of weakness, and by at least doubly scoring to weaken the layers beneath said point, thus greatly facilitating puncturing the pouch, as specifically stated in the spec., on p.11, line 6.

Claim 1 has been modified to define the final thickness of the sealant layer as 80-90 microns, as specifically stated in the spec., on p.4, line 18, in order to remove Sec. 112 rejections by adding descriptive language regarding the final thickness of the sealant layer, and to clarify terms where necessary.

In addition, claim 1 has been amended to specifically recite supplementing the inner sealant layer with molten sealant applied by extrusion coating, along the entire outer surface of the inner sealant layer, thereby occluding the punched hole and simultaneously providing a specific area of weakness for ease of puncture.

The molten sealant supplement completes the final thickness of the inner sealant layer, while simultaneously functioning as the equivalent of an integral closure-sheeting patch.

Claim 5 has been modified to stress that the method uses a directed movable laser source, (spec, p.10, line

21), enabling more than one pass over the same point, (spec. p.6, lines 1-5) to provide a point of weakness, and by at least double scoring to weaken the layers beneath said point, thus greatly facilitating puncturing the pouch, as stated in the referenced portion of the spec.

The inventive laser method is inherently more efficient and flexible as it uses a movable laser source.

The heat transmitted through the structural layers to the sealant layer is believed to be sufficient to cause thermally driven changes in the sealant, making it easier to puncture the pouch at the puncture point.

It is believed that the amendment to claim 5 does not raise a new issue, as it is well supported by the spec., as indicated herein, and this was previously presented to the Examiner in the Response filed May 29, 2003 (page 6).

The Examiner has rejected claims 5-7, 9-13, 15,18 and 19 under Sec. 102(b) as being anticipated by Yoshida.

The Yoshida laser method differs substantially from the laser method described in the present application. Yoshida teaches providing the panel segment with a pattern of score lines in a portion of the reinforcing outer layer by means of a single application of a laser, which is directed at the bag through a mask.

Yoshida's method does not enable multiple passes over the same point. The heat transmitted through the structural layers to the sealant layer of Yoshida does not cause thermally driven changes in the sealant, and does not make it easier to puncture the pouch at the puncture point.

In the interview, the Examiner noted that Yoshida does not appear to show double scoring.

Since there is no disclosure by Yoshida of a movable laser source which enables a process of weakening the material by double scoring the area of the structural layer

where the beam paths intersect, it cannot be fairly said that Yoshida anticipates the claims under Sec. 102(b).

The features of the present invention, recited in the dependent claims 6-7 and 9-11 are deemed to be patentable as being based on independent claim 5, which is deemed patentable.

Independent claim 12 recites "laser score paths" which is not disclosed by Yoshida and therefore it, and the dependent claims 13 and 15, are also not anticipated.

Independent claim 18 recites a construction wherein the holes are occluded, and this is not disclosed by Yoshida and therefore claim 18, and the dependent claim 19, are also not anticipated.

As stated in the decision in In Re Marshall, 198 USPQ 344 (1978), "To constitute an anticipation, all material elements recited in a claim must be found in one unit of prior art…". Since the Yoshida reference neither 1) identically describes the invention, nor 2) enables one skilled in the art to practice it, Applicant deems the 102(b) rejection improper, and respectfully requests that it be withdrawn.

The Examiner has rejected claims 1-4 under Sec. 103(a) as being unpatentable over Wild (5,868,658)in view of Heller (3,459,625).

The Wild method and apparatus for making beverage containers differs substantially from the method described in the present application. The Wild method teaches the formation of a piercing hole in a front side sheeting web and welding of a closure sheeting web around the piercing hole, as described in col. 1, lines 38-44.

The piercing hole, in Wild, is punched completely through the front sheeting web, as described in column 3, lines 38-40. This may be clearly seen in Fig. 5, showing a closure sheeting web patch welded around the hole,

significantly increasing the thickness of the final product.

In contrast, in the present invention, an additional patch is not required since the punched holes are covered by extrusion lamination that occludes the entire surface of the front side web, per the specification at p. 5, lines 1-6.

The patent to Heller discloses a method designed to strengthen "windows" in cartons, and thereby to ensure no leakage. Heller does not create a specific area of weakness designed for ease of puncture.

In contrast, the present invention discloses a method comprising the step of punching a hole through all the layers of the first panel, thereby creating a specific area of weakness designed for ease of puncture.

Claim 1 has been amended to stress that the method comprises the step of punching a hole through all the layers of the first panel, thereby creating a specific area of weakness designed for ease of puncture.

It is the Applicant's position that the combination of the Wild and Heller references to form the basis of the Sec. 103(a) rejection is improper, and Applicant respectfully requests that it be withdrawn.

Therefore, claim 1 is deemed to be patentable, and the features recited in the dependent claims 2-4 are deemed to be patentable as being based thereon.

The Examiner has rejected claims 8 and 14 (Claim 16 had been previously cancelled.) under Sec. 103(a) as being unpatentable over Yoshida.

Regarding claim 8, Yoshida does not teach a beam containing 3-4 times the energy used in normal scoring treatment, because the mask blocks a substantial part of the energy.

Regarding claim 14, Yoshida does not teach having the width of the laser score paths 3-4 times wider than normal, because when using a mask as in Yoshida, precise focusing is crucial. The present invention does not use a mask and therefore may set the width of the laser score paths 3-4 times wider than normal.

Therefore, claims 8 and 14 are deemed to be patentable.

The Examiner has rejected claims 17 and 20 under Sec. 103(a) as being unpatentable over Wild (5,868,658)in view of Yoshida (4,762,514).

Regarding claim 17, neither Wild nor Yoshida discloses a method in which the sealant layer is provided at half its final thickness.

In the interview, the Examiner acknowledged the Applicant's arguments that Yoshida is non-analogous art with respect to claims 1 and 20.

In citing the references under Sec. 103(a), the question is raised whether the references would suggest the invention, as stated in the decision of In Re Lintner (172 USPQ 560, 562, CCPA 1972);

> "In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed substitution, combination or other modification."

Similarly, In Re Regel (188 USPQ 136, CCPA 1975) decided that the question raised under Sec. 103 is whether the prior art taken as a whole would suggest the claimed invention to one of ordinary skill in the art. Accordingly, even if all the elements of a claim are disclosed in various prior art references, the claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of

ordinary skill would have been prompted to combine the teachings of the references to arrive at the claimed invention.

Simply put, and as stated in In Re Clinton (188 USPQ 365 CCPA 1976), "do the references themselves... suggest doing what appellants have done", such that there is a requirement that the prior art must have made any proposed modification or changes in the prior art obvious to do, rather than obvious to try.

It is respectfully put forward by the Applicant that there is no reason to consider the prior art references, Wild, Heller and Yoshida, either individually or in combination, as rendering the invention obvious, since none of them discloses a method in which the punched holes are occluded by extrusion lamination that simultaneously covers the entire surface of the front side web, while maintaining the thickness of the final product. In addition, none of them discloses a process of weakening the material using a movable laser that enables more than one pass over the same point, weakening the area of the structural layer beneath the puncture point, by at least doubly scoring the puncture point.

In view of the foregoing remarks, all of the claims in the application are deemed to be allowable. Further reconsideration and allowance of the application is respectfully requested at an early date.

Respectfully submitted,

Edward Langer, Pat. Atty.
Attorney for Applicant
Reg. No. 30, 564

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